

WHAT IS CLAIMED IS:

1. A battery tester for testing a storage battery, comprising:

electronic test circuitry configured to couple to the battery and provide a measurement output related to a condition of the battery;

a user input configured to receive a query response from a user to a user query given to the user;

a memory containing a plurality of user queries related to battery query and a plurality of query relationships which relate the query response from the user to one or more queries to battery type; and

a processor configured to output information related to a determined battery type based upon the query response and at least one of the plurality of query relationships and the measurement output.

2. The apparatus of claim 1 wherein the response relates to observations about the battery.

3. The apparatus of claim 1 wherein the measurement output comprises a dynamic parameter.

4. The apparatus of claim 1 including Kelvin connections configured to couple the electronic test circuitry to the battery.

5. The apparatus of claim 1 wherein the measurement output is a function of an applied forcing function having a time varying signal.

6. The apparatus of claim 1 wherein the user input receives a plurality of query responses to a plurality of queries and the output information related to battery condition is based upon the plurality of query responses.

7. The apparatus of claim 1 including a display to display queries.

8. The apparatus of claim 1 wherein the memory contains information related to a particular type of battery test and the query response is used to select the particular type of battery test.

9. The apparatus of claim 1 wherein the query relates to observable physical construction of the battery.

10. The apparatus of claim 1 wherein the query relates to a shape of the battery.

11. The apparatus of claim 1 wherein the query relates to a color of the battery.
12. The apparatus of claim 1 wherein the query relates to caps on the battery.
13. The apparatus of claim 1 wherein the query relates to a tube connected to the battery.
14. The apparatus of claim 1 wherein the query relates to a visible liquid level of the battery.
15. The apparatus of claim 1 wherein the query relates to a "magic eye" on the battery.
16. The apparatus of claim 1 wherein the query relates to the brand label on the battery.
17. The apparatus of claim 1 wherein the battery type comprises sealed lead acid.
18. The apparatus of claim 1 wherein the battery type comprises vented lead acid.
19. The apparatus of claim 1 wherein the battery type comprises spiral.
20. The apparatus of claim 1 wherein the battery type comprises deep cycle.

21. The apparatus of claim 1 wherein the battery type comprises an electrolyte gelatin.

22. The apparatus of claim 1 wherein the battery type comprises an absorbed glass matt.

23. The apparatus of claim 1 wherein the battery type comprises starting, lighting, ignition battery.

24. The apparatus of claim 1 wherein the battery type comprises sealed flooded.

25. The apparatus of claim 1 wherein the battery type comprises antimony.

26. The apparatus of claim 1 wherein the battery type comprises hybrid.

27. The apparatus of claim 1 wherein the measurement circuitry performs a load test.

28. A method of testing a storage battery, comprising:

 querying an operator with a query regarding
 a physical characteristic of the
 battery;
 receiving a query response;

determining battery type based upon at least one query response; and testing the battery based upon a measurement of a parameter of the battery and the at least one query response.

29. The method of claim 28 including retrieving the query from a memory.

30. The method of claim 29 wherein the memory contains a relationship between a query response and a battery type.

31. The method of claim 28 wherein the response relates to observations about the battery.

32. The method of claim 28 wherein the parameter comprises a dynamic parameter.

33. The method of claim 28 including coupling to the battery with Kelvin connection.

34. The method of claim 28 wherein the parameter is a function of an applied forcing function having a time varying signal.

35. The method of claim 28 wherein the testing is based upon the plurality of query responses.

36. The method of claim 28 including displaying display queries.

37. The method of claim 28 selecting a type of battery test based upon the query response.

38. The method of claim 28 wherein the query relates to observable physical construction of the battery.

39. The method of claim 28 wherein the query relates to a shape of the battery.

40. The method of claim 28 wherein the query relates to a color of the battery.

41. The method of claim 28 wherein the query relates to caps on the battery.

42. The method of claim 28 wherein the query relates to a tube connected to the battery.

43. The method of claim 28 wherein the query relates to a visible liquid level of the battery.

44. The method of claim 28 wherein the query relates to a "magic eye" on the battery.

45. The method of claim 28 wherein the query relates to the brand label on the battery.

46. The method of claim 28 wherein the battery type comprises sealed lead acid.

47. The method of claim 28 wherein the battery type comprises vented lead acid.

48. The method of claim 28 wherein the battery type comprises spiral.

49. The method of claim 28 wherein the battery type comprises deep cycle.

50. The method of claim 28 wherein the battery type comprises an electrolyte gelatin.

51. The method of claim 28 wherein the battery type comprises an absorbed glass matt.

52. The method of claim 28 wherein the battery type comprises starting, lighting, ignition battery.

53. The method of claim 28 wherein the battery type comprises sealed flooded.

54. The method of claim 28 wherein the battery type comprises antimony.

55. The method of claim 28 wherein the battery type comprises hybrid.